UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,828	01/03/2001	Dennis C. Ferguson	0023-0026	9942

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HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER
LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 July 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9, 11, 14-17, 19, 24, 27, 28, 30 -36* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9, 11, 14-17, 19, 24, 27, 28, 30 -36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1 – 9, 11, 14 – 17, 19, 24, 27, 28, 30 – 36, are rejected under 35 U.S.C.

103(a) as being unpatentable over Federkins et al. (U.S. Patent No. 5123014) in view of

Gulick (U.S. Patent No. 5845085).

Regarding claims 1, 31, Federkins et al. disclose the limitation of a method of

processing data in a data transmitting system (Abstract, lines 1 – 5), comprising:

forwarding data for further processing in the data transmitting system when data is being

received (column 1, lines 54 – 59); generating packet information by processing the data

and the idle time synchronizing information in accordance with a packet protocol (column

1, lines 60 – 65; column 3, lines 25 – 29; 39 – 49). Federkins et al. do not disclose

expressly generating idle time synchronizing information including at least a runt abort

packet during idle time when data is not being received, the idle time synchronizing

information for synchronizing a data receiving system with the data transmitting system;

Gulick discloses the limitation of generating idle time synchronizing information including

at least a runt abort packet during idle time when data is not being received, the idle time

synchronizing information for synchronizing a data receiving system with the data

transmitting system (column 1, lines 60 – 68; column 2, lines 1 – 2; column 2, lines 32 – 52).It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Federkins et al. to include generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system such as that taught by Gulick in order to provide a receiver for a high-level data-link controller which is capable of performing flag and abort detections, in-frame and out-of-frame determinations, zero-deletions, and several higher level controlling functions (as suggested by Gulick, see column 1, lines 9 – 12).

Regarding claims 2, 11, 19, 35, Federkins et al. disclose the limitation of a method of processing data in a data transmitting system (Abstract, lines 1 – 5), Federkins et al. do not disclose the method of claimed wherein a runt abort packet includes: a packet having a length of less than six bytes. Gulick discloses the limitation of the method of claimed wherein a runt abort packet includes: a packet having a length of less than six bytes (column 1, lines 62 – 66; column 2, lines 32 – 43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Federkins et al. to include claimed wherein a runt abort packet includes: a packet having a length of less than six bytes such as that taught by Gulick in order to provide a receiver for a high-level data-link controller which is capable of performing flag and abort detections, in-frame and out-of-frame determinations, zero-deletions, and several higher level controlling functions (as suggested by Gulick, see column 1, lines 9 – 12).

Regarding claims 3, 32, Federkins et al. disclose the limitation of a method of

processing data in a data transmitting system (Abstract, lines 1 – 5), Federkins et al. do

not disclose the method of claimed wherein the step of generating idle time

synchronizing information a runt abort packet includes: a runt abort packet having an

abort byte sequence at an end of the runt abort packet. Gulick discloses the limitation of

disclose the method of claimed wherein the step of generating idle time synchronizing

information preparing a runt abort packet includes: preparing a runt abort packet having

an abort byte sequence at an end of the runt abort packet (column 1, lines 61 – 65;

column 2, lines 7 – 43). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Federkins et al. to include a method of

claimed wherein the step of generating idle time synchronizing information preparing a

runt abort packet includes: preparing a runt abort packet having an abort byte sequence

at an end of the runt abort packet such as that taught by Gulick in order to provide a

receiver for a high-level data-link controller which is capable of performing flag and abort

detections, in-frame and out-of-frame determinations, zero-deletions, and several higher

level controlling functions (as suggested by Gulick, see column 1, lines 9 – 12).

Regarding claims 4, Federkins et al. disclose the limitation of the method of

claimed further including: loading idle time indication information into a data format

consistent with the packet protocol (column 3, lines 40 – 44).

Regarding claims 5, Federkins et al. disclose the limitation of the method of

claimed further including: alternately forwarding the idle time synchronization information

and idle time indication information (column 1, lines 60 – 65; column 3, lines 7 – 9; Fig. 3).

Regarding claims 7, 15, 28, 34, Federkins et al. disclose the limitation of the method of claimed further including: creating network information by processing the packet information in accordance with a transport protocol (column 1, lines 65 – 68; column 2, lines 39 – 44); and forwarding the network information to a data receiving system (column 2, lines 1 –2; column 3, lines 44 – 48).

Regarding claims 9, 17, 36, Federkins et al. disclose the limitation of apparatus for processing data in a data transmitting system (Fig. 4, element 410, 450, column 3, lines 39 – 54), comprising: a data element for forwarding data for further processing in the data transmitting system when data is being received and creating idle time synchronizing information during idle time when data is not being received, the idle time synchronization information for synchronization a data receiving system with the data transmitting system and placing the data receiving system in a correct state with respect to whether an inter-frame time byte or a data byte is being received (column 2, lines 30 – 32; column 3, lines 39 – 49; column 4, lines 31 - 53), and a packet processing element for creating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol (column 4, lines 31 - 53). Federkins et al. do not disclose expressly wherein the idle time synchronizing information includes an alternating sequence of runt abort packets and idle time indication bytes. Gulick discloses the limitation of wherein the idle time synchronizing information includes an alternating sequence of runt abort packets and idle time indication bytes (column 2, lines

18 – 43). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Federkins et al. to include wherein the idle time

synchronizing information includes an alternating sequence of runt abort packets and idle

time indication bytes such as that taught by Gulick in order to provide a receiver for a

high-level data-link controller which is capable of performing flag and abort detections, in-

frame and out-of-frame determinations, zero-deletions, and several higher level

controlling functions (as suggested by Gulick, see column 1, lines 9 – 12).

Regarding claims 24, 30, Federkins et al. discloses the limitation of a method for

synchronizing a transmitting system with a receiving system (Abstract, lines 1 – 5),

comprising: forwarding data from the transmitting system to the receiving system when

data is being received by the transmitting system (column 3, lines 40 – 58); creating an

idle time synchronizing packet during idle time when the transmitting system is not

receiving data (column 1, lines 60 - 65); forwarding the idle time synchronization packet

to the receiving system (column 1, lines 65 – 68; column 2, lines 1 – 2); and processing

the idle time synchronization packet at the receiving system to synchronize the receiving

system with the transmitting system column 3, lines 54 – 61), wherein: the processing the

idle time synchronization packet further comprises: causing the receiving system to be

placed in a correct state with respect to whether an inter-frame time fill byte or a data

byte is being received (column 4, lines 31 – 53).

3.   Claims 6, 8, 14, 16, 27, 33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Federkins et al. (U.S. Patent No. 5123014) and Gulick (U.S. Patent

No. 5845085) as applied to claims 1 – 9, 11, 14 – 17, 19, 24, 27, 28, 30 – 36 above, and

further in view of Anderson et al. (U.S. Patent No. 6263443 B1).

Regarding claims 6, 14, both Federlins et al. and Gulick fail to disclose expressly

the apparatus of claim 9, wherein the packet processing element comprises: a scrambler

for scrambling the idle time synchronizing information. Anderson et al. discloses the

limitation of the apparatus of claim 9, wherein the packet processing element comprises:

a scrambler for scrambling the idle time synchronizing information (Fig. 2, element 140,

column 3, lines 52 – 62). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify both Federlins et al. and Gulick to include an

apparatus of claimed wherein the packet processing element comprises: a scrambler for

scrambling the idle time synchronizing information such as that taught by Anderson et al.

in order to provide a protocol governing the transmission of a datagram received from

network elements employing the Internet Protocol (IP) or a similar protocol (as suggested

by Anderson et al., see column 1, lines 7 – 9).

Regarding claims 8, 16, both Federlins et al. and Gulick fail to disclose expressly

the apparatus of claim 15, wherein the network processing element comprises: a

scrambler for scrambling the packet information. Anderson et al. discloses the limitation

of the apparatus of claim 15, wherein the network processing element comprises: a

scrambler for scrambling the packet information (Fig. 2, element 500, column 4, lines 9 –

12; column 5, lines 1 – 9). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify both Federlins et al. and Gulick to include an

apparatus of claimed wherein the network processing element comprises: a scrambler

for scrambling the packet information such as that taught by Anderson et al. in order to provide a protocol governing the transmission of a datagram received from network elements employing the Internet Protocol (IP) or a similar protocol (as suggested by Anderson et al., see column 1, lines 7 – 9).

Regarding claims 23, 27, 33, both Federlins et al. and Gulick do not disclose expressly the apparatus of claimed wherein the processing element comprises: a descrambler for descrambling the idle time synchronizing packet. Anderson et al. disclose the limitation of the apparatus of claimed wherein the processing element comprises: a descrambler for descrambling the idle time synchronizing packet (Fig. 5, element 705, column 5, lines 35 – 42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify both Federlins et al. and Gulick to include an apparatus of claimed wherein the processing element comprises: a descrambler for descrambling the idle time synchronizing packet such as that taught by Anderson et al. in order to provide a protocol governing the transmission of a datagram received from network elements employing the Internet Protocol (IP) or a similar protocol (as suggested by Anderson et al., see column 1, lines 7 – 9).

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).
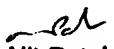
Ajit Patel
Primary Examiner

ACL   Oct 10, 2005